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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/642,660	08/22/2000	Jonathan Schneck	01107.00042	9271

7590 12/17/2003

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EXAMINER

YAEN, CHRISTOPHER H

ART UNIT	PAPER NUMBER
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1642

DATE MAILED: 12/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

18

Office Action Summary

Applicati n N .

09/642,660

Applicant(s)

SCHNECK ET AL.

Examiner

Christopher H Yaen

Art Unit

1642

-- The MAILING DATE of this communication appears on the cover sheet with the c rresp ndence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 28-32 and 51-60 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 28,29,31,32,53 and 56 is/are rejected.
- 7) ☒ Claim(s) 30,52,54,55 and 57-60 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

1. The amendment filed 9/22/2003 (paper no. 17) is acknowledged and entered into the record.
2. Claims 1-27, 33-50 are canceled without prejudice or disclaimer.
3. Claims 28-32 and 51-60 are pending and examined on the merits.

New Arguments

Claim Rejections - 35 USC § 102

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
5. Claims 28-29,31-32,51, and 53 are rejected under 35 U.S.C. 102(b) as being anticipated by Dal Porto *et al* (PNAS USA 1993 July; 90:6671-6675, cited in IDS filed 8/22/2000). Claims are drawn to a composition comprising a cell in which a molecular complex is bound to the surface of the cell, wherein the molecular complex comprises at least 2 first fusion protein and at least 2 second fusion protein (claim 28). The claims are also further limited to the first transmembrane polypeptide being an MHC class II β chain and wherein the second transmembrane polypeptide is an MHC class II α chain (claim 29); further comprising a pharmaceutically acceptable carrier (claim 31); a population of the molecular complexes is bound to the cell, wherein an identical antigenic peptide is bound to each ligand binding site (claim 32); wherein the immunoglobulin heavy chain is an IgG1 heavy chain (claim 51); wherein the first fusion protein comprises a first peptide linker between the Ig heavy chain and the extracellular

domain of the first transmembrane polypeptide and wherein the second fusion protein comprises a second peptide linker between the Ig light chain and the extracellular domain of the second transmembrane polypeptide (claim 53); and wherein the antigenic peptides are bound to the ligand binding sites (claim 56).

Dal Porto *et al* disclose of a composition comprising a cell on which a molecular complex is bound to its surface, wherein the molecular complex comprises two first fusion polypeptides, wherein the first fusion protein comprising a MHC class II α fused to a heavy chain (of IgG1 subtype) and a second fusion polypeptide comprising a MHC class II β fused to a light chain (see figure 1B page 6672). Dal Porto *et al* also disclose that the said composition is in a pharmaceutically acceptable carrier, namely PBS. It is also disclosed that the linkers or spacers are used between the MHC class II α or β and the heavy chain or light chain Ig molecule. When alloreactive T-cells of Dal Porto *et al* are incubated with the said molecular complex, inherently, the molecular complex will be bound to the surface of the cell, and because the MHC molecules used have the same binding pockets or grooves, then they too will also bind to the same antigenic peptide and hence will also bind the ligand binding site.

All other rejections are withdrawn in view of the applicant's amendments and arguments thereto as set forth in Paper No. 17.

Conclusion

6. Claims 28-29,31-32,51, 53, and 56 are rejected.
7. Claims 30, 52, 54-55, 57-60 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher H Yaen whose telephone number is 703-305-3586. The examiner can normally be reached on Monday-Friday 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Caputa can be reached on 703-308-3995. The fax phone number for the organization where this application or proceeding is assigned is 703-308-4242.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.

Christopher Yaen
Art Unit 1642
December 11, 2003

G
Christopher Yaen
Examiner